

ABSTRACT

An image processing device for performing a data decompression is provided. The image processing device includes a decoder circuit having a plurality of stages for decompressing compressed image data of a plurality of pixels. The decoder circuit is configured to divide the pixels into a plurality of groups. The first stage performs prediction compensation on the compressed image data of a first pixel of the first group at a first time to generate first prediction data, and performs the prediction compensation on the compressed image data of a second pixel of the first group at a second time using the first prediction data. The second stage performs the prediction compensation on the compressed image data of a first pixel of the second group at the second time using the first prediction data, to generate second prediction data.

FIG. 6